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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/642,061	08/18/2000	Blake Lewis	103.1035.01	6742

22883 7590 10/04/2002

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EXAMINER

LE, MIRANDA

ART UNIT PAPER NUMBER

2177

DATE MAILED: 10/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/642,061

Applicant(s)

LEWIS ET AL.

Examiner

Miranda Le

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3, 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "115" has been used to designate both "other block" and "active map" (see Fig. 1). Correction is required.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

- Pages 15, 17-19 refer to "active file system 110" of Figure 1.
- Pages 15-18 refer to "inode file 105" of Fig. 1.
- Page 22, 23 refers to "double indirect blocks 332", "indirect blocks 250, 251, 252", "data blocks 260, 262, 263, 264", "blocks of binary numbers 272, 273, 274, 275, and 276" of Fig. 2.
- Page 23 refers to "other block 328" of Fig. 2.
- Page 24 refers to "file system 100" and "method 400" of Fig. 3.

Correction is required.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: "inode file 202" of Fig. 1, "indirect 241" of Fig. 2, "data block 250" of Fig. 2. Correction is required.

Specification

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it is more than 150 words.
Correction is required.

5. The following is a quote in part of MPEP 608.01(p), concerning the incorporation of subject matter by reference:

"The Commissioner has considerable discretion in determining what may or may not be incorporated by reference in a patent application. *General Electric Co. v. Brenner*, 407 F.2d 1258, 159 USPQ 335 (D.C. Cir. 1968). The incorporation by reference practice with reference to applications which issue as U.S. patents provides the public with a patent disclosure which minimizes the public's burden to search for and obtain copies of documents incorporated by reference which may not be readily available. Through the Office's incorporation by reference policy the Office ensures that reasonably complete disclosures are published as U.S. patents. The following is the manner in which the Commissioner has elected to exercise that discretion.

An application as filed must be complete in itself in order to comply with 35 U.S.C. 112. Material nevertheless may be incorporated by reference, *Ex parte Schwarze*, 151 USPQ 426 (Bd. App. 1966). An

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application for a patent when filed may incorporate "essential material" by reference to (1) a U.S. patent or (2) a pending U.S. application, subject to the conditions set forth below.

"Essential material" is defined as that which is necessary to (1) describe the claimed invention, (2) provide an enabling disclosure of the claimed invention, or (3) describe the best mode (35 U.S.C. 112). In any application which is to issue as a U.S. patent, essential material may not be incorporated by reference to (1) patents or applications published by foreign countries or a regional patent office, (2) non-patent publications, (3) a U.S. patent or application which itself incorporates "essential material" by reference, or (4) a foreign application.

Nonessential subject matter may be incorporated by reference to (1) patents or applications published by the United States or foreign countries or regional patent offices, (2) prior filed, commonly owned U.S. applications, or (3) non-patent publications. Nonessential subject matter is subject matter referred to for purposes of indicating the background of the invention or illustrating the state of the art.

Mere reference to another application, patent, or publication is not an incorporation of anything therein into the application containing such reference for the purpose of the disclosure required by 35 U.S.C. 112, first paragraph. *In re de Seversky*, 474 F.2d 671, 177 USPQ 144, (CCPA 1973). In addition to other requirements for an application, the referencing application should include an identification of the referenced patent, application, or publication. Particular attention should be directed to specific portions of the referenced document where the subject matter being incorporated may be found. Guidelines for situations where applicant is permitted to fill in a number for Serial No. _____ left blank in the application as filed can be found in *In re Fouché*, 439 F.2d 1237, 169 USPQ 429 (CCPA 1971) (Abandoned applications less than 20 years old can be incorporated by reference to same extent as copending applications; both types are open to public upon referencing application issuing as a patent)."

The disclosure on pp. 8-9 is objected to since some of these applications have no US Patent Application Serial Numbers issued by the USPTO for the purpose of cross-referencing. Appropriate correction is required.

Claim Objections

5. Claims 6, 13, 21 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim ~~1, 5, 9, 12, 16, 20~~ should refer to other claims in the alternative only (i.e. 1 or 5, 9 or 12, 16 or 20), and cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 6, 13, 21 and their dependent claims have not been further treated on the merits.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Hitz et al. (US Patent No. 5,819,292).

Hitz anticipated independent claims 1, 9, 16 by the following:

8. As per claim 1, Hitz teaches “a method... recording an active map in file system of storage blocks not available for writing data...” at abstract, col. 4, lines 6-43, col. 9, line 50 - col. 10, line 19;

“recording a consistency point in file system including a consistent version of file system at a previous time, consistency point including a copy of active map at previous time...” at abstract, col. 4, lines 6-43, col. 9, line 50 - col. 10, line 19;

“refraining from writing data to storage blocks in response to active map; and at least one of copy of active map at previous time ...” at Fig. 11 A-D, col. 4, lines 6-43, col. 9, line 50 - col. 10, line 19, col. 11, line 1 – col. 12, line 58.

9. As per claim 9, Hitz teaches “a method...recording a consistency point in file system including a consistent version of file system at a previous time, consistency point

including a copy of active map at previous time...” at abstract, col. 4, lines 6-43, col. 9, line 50 - col. 10, line 19, col. 12, lines 9-38.

“returning to file system at a previous time using consistent version of file system following an unintended deletion or modification...” at col. 12, lines 9-38, col. 19, line 13 – col. 20, line 31.

10. As per claim 16, Hitz teaches “a method for saving previous versions of an active file system including the contents of the files and directories in a file system, file system comprising a set of storage blocks in a mass storage system including steps for

“writing modified files to unused data blocks...” at col. 11, line 6 – col. 12, line 38;

“keeping previous files in currently occupied blocks...: at col. 12, lines 9-38, col. 13, lines 31-45, col. 17, lines 56-64, col. 18, line 66 – col. 19, line 19 ;

“and recording a consistency point in said file system including a consistent version of file system at a previous time, consistency point including a copy of active map at previous time...” at abstract, col. 4, lines 6-43, col. 9, line 50 - col. 10, line 19, col. 12, lines 9-38.

11. As per claim 2, Hitz teaches “step for refraining ... determining a logical union of storage blocks used by one or more of copies of active map at previous time...” at abstract, 4, lines 6-43, col. 19, lines 20-40.

12. As per claim 3, Hitz teaches “determining a subset of storage blocks used by one or more of copies of active map at previous time ...” at abstract, Fig. 11 A-D, col. 4, lines 6-43, col. 9, line 50 - col. 10, line 19, col. 11, line 1 – col. 12, line 58.

13. As per claims 4, 11, 19, Hitz teaches “file system is a WAFL file system ...” at col. 5, lines 48-59, col. 11, lines 6-27.

14. As per claims 5, 12, 20, Hitz teaches “active map at previous time is a snapmap...” at abstract, Fig. 11 A-D, col. 4, lines 6-43, col. 9, line 50 - col. 10, line 19, col. 11, line 1 – col. 12, line 58.

15. As per claim 8, 15, 23, Hitz teaches “a copy-on-write mechanism for copying modified data to a new block and saving old data in a current data block ...” at col. 11, line 1 – col. 12, line 38, col. 16, lines 10-21.

16. As per claim 10, Hitz teaches “consistent version includes a pointer to a previous root block of the inode file...” at col. 14, lines 34-45, col. 15, lines 35-47.

17. As per claim 17, Hitz teaches “retrieving file system at a previous time using a pointer ...” at col. 11, lines 40-59.

18. As per claim 18, Hitz teaches "pointer corresponds to a root block of file system at a previous time ..." at col. 9, lines 1-17.

15. As per claim 22, Hitz teaches "steps for determining not to write to a block after said step, provided the previous or next snapmap uses said block ..." at col. 4, lines 18-20, col. 11, lines 29-59, col. 19, line 20-40.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (703) 305-3203. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene, can be reached on (703) 305-9790. The fax number to this Art Unit is (703) 746-7238.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

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JOHN BREENE
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